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CONSIDERATIONS ON A NATURAL MISFORTUNE.

MISFORTUNES fall upon the just and the unjust alike. The stricken deer goes to weep—the hart ungalled to play. Some must watch, while some may sleep. So, we are told, runs the world. It is also a well-known fact, that certain individuals may steal specimens of the equine tribe with impunity, while others are so extremely unlucky, that to look over the enclosure of the park in which the transaction takes place, is almost sure to subject them to the unpleasant result of having themselves suspended by the neck, until the vital spark, to use the appropriate language of the newspapers, has fled for ever. How common is it, moreover, to find virtue in comminuted and re-pieced attire, while cloth of gold and silver covers the person of wickedness and oppression! How frequently, alas, do the good suffer for years the slings and arrows of outrageous fortune, while the evil-doer goes on without suspicion, enjoying all desirable edibles and potables, and perplexing, by his undeserved prosperity, the best endeavours to penetrate the mystery of human life!

It has always appeared to us that the partiality of fortune is shown in few things so strikingly, as in the distribution of colour amongst the noses of men. In this department of her economy, she manifests more than injustice—she shows a wantonness, as if, like the cat, she loved not only to afflict, but also to sport with her victims. It is scarcely necessary, in the first place, to observe, that red noses, judged upon philosophical principles, fall into two grand divisions, the Spontaneous and the Non-Spontaneous. The Spontaneous are those which are incurred by a certain habit depending on the will of the proprietor—the indulgence, to wit, of too much drinking of strong waters; the spirit of the said waters tending, by a process in animal chemistry which we have never heard explained, to produce an inflammation and redness over the nasal region of the individual indulging in them. It must of course be apparent, that he who thus brings the colouring upon himself, and thereby becomes liable to the evil fame which attends such indulgences, has no occasion whatever to rail at Lady Fortune. He knew beforehand what would be the probable result of his mode of life. He might have saved himself from the evil, if he had chosen. He did not choose to do so, and, lo! the day of punishment has come; the beacon fire has been kindled; and he stands for ever before men, as a warning calling upon them, as they love their noses and their reputation, to avoid the same error. So far, indeed, from appealing against this award of nature, gentlemen possessing red noses of the Spontaneous order, ought rather, while calmly submitting to their fate, to take a conscientious pleasure in contemplating that mysterious arrangement by which it is so contrived, that liquors imbibed into the mouth in secret should betray themselves through the medium of another and more conspicuous feature. Considering that the nose has no ostensible responsibility for the doings of the mouth, but has quite enough of follies of its own to answer for, the idea of its being made a kind of alcoholimeter, or index for the detection of the amount of liquor which has passed clandestinely below it, becomes a very impressive one, not only to the sufferer himself, but to all individuals of liberal and enlightened minds. The conscious feature seems as if it had blushed so often and so deeply for the swelling brimmers it had overlooked in the process of hiation, that at length the blood refused any longer to be at the trouble of coming back, and resolved to stay there once and for all. Surely that infatuation in murderers which so often leads to their being self-delivered to justice, is not a more admirable circumstance, than is this wonderful relation between guilty gob and betraying beak.

It would be all very well if a red nose had simply been the invariable accompaniment of a too bibulous mouth—in other words, if the Spontaneous had been the only class of red noses. But, unfortunately, red noses are, in many cases, the result of no alimentary indulgences on the part of the patient, but come purely by destiny. In perhaps fully one-third of instances, they depend on some principle either in the blood or the skin, quite beyond the control of those who bear them. Now, the hardship is, that there is no external difference between the Spontaneous and the Non-Spontaneous, by which the one may be distinguished from the other. Hence, a considerable number of persons are exposed, throughout their whole lives, to an ever-impending suspicion that they are addicted to the inordinate use of those fluids, which, unlike the fluids known to the geologist, have both an elevating and a degrading tendency. This is a circumstance which is more apt to affect the deportment and whole economy of an individual, than may at first sight appear to an unafflicted party.

The virtuous man with a red nose has, in the first place, the pain of living in a state of constant liability to suspicion. It is an extremely good thing to have a mind free from all self-accusation—in short, a clear conscience; but it is astonishing how much this happiness is increased, when we have also the pleasing consciousness that we get credit for a clear conscience among our fellow-creatures. A man cannot live as an isolated being: he lives as a part of a mass. It may occasionally be his duty to take quite a different course from what the mass approves of; but when he does so, he must be considered as heroically encountering a great pain for the sake of principle. In ordinary circumstances, the individual must be at some degree of peace with the multitude of which he is a part, in order to enjoy any fair share of happiness. Now, how distressing must it be for a man, perhaps of unusually sensitive feelings, when he finds that a streak of colour freakishly imposed upon his countenance by nature, subjects him, wherever he goes, to the imputation of a vice which he has all his life held in the greatest detestation, and of which he is altogether guiltless. In his own breast, he knows how free he is from it. His innocence is admitted, we shall suppose, by the members of his family. Even in his circle of acquaintance, it may be generally believed that his nose is not red through any fault of his. All this will be cheering to him. But then he cannot be always in the presence of his family and immediate friends. Every day of his life he must come in contact with many strangers, who will not be able to behold his fore-light without having their own notions as to the kind of oil with which it is fed. The glowing feature can neither be veiled, neither can he carry appended from it a placard bearing the exculpatory words, "Not produced by alcohol." There it goes, ever before him, and ever exposed to all the depreciatory surmises to which a red nose is apt to give rise. The polite view it with restrained, but not altogether suppressed surprise. The rude and vulgar, as it passes them on the streets and highways, make it the subject of a thousand jocular remarks. Every where, and in all circumstances, it attracts attention, and awakens ridicule, even though it may be spared suspicion. Hundreds of men of ordinary noses imbibe ten times more than he of the red one, but never is a word breathed against them; while he, though innocent as the sucking babe, is twigged and jested at and maligned by all who set their eyes upon him.

With a man of eminent self-esteem, it might be of little consequence that he stood in this relation to his fellow-creatures; but with the great majority, who have not nearly enough of pride to be independent of the good consideration of others, it must be truly grievous, and greatly inconvenient. He who feels that he is suspected, loses much of his natural and rightful freedom of action. While others can at once and unrestrictedly address themselves to the business before them, *he* is troubled by a wish to do it in such a way that he may allay suspicion. He would rather, perhaps, do something that would have a good appearance, leaving the real thing undone, than do the real thing, and, in the doing of it, give a momentary force to the suspicions to which he feels himself obnoxious. Thus the man with the non-spontaneous red nose is apt to be every moment led aside from the plain path chalked out for him, by an anxiety to neutralise the surmises which he thinks likely to be formed and forming with reference to that leading feature in his character. The great end of his existence is to impress upon mankind that his anterior rubicundity is a matter in which his stars are more at fault than he. His time, his thoughts, his whole course of procedure, as he walks through the wilderness of this world, are in a great degree directed to this object, so as necessarily to put him at a great disadvantage beside the fortunate man who has no nose calling for palliation or excuse. In fact, it is not too much to suppose that many excellent men must have come to utter ruin through nothing but an undue solicitude respecting the opinions which were to be formed on the subject of their noses.

While thus directly affecting prosperity, the non-spontaneous red nose is also apt to give a certain unpleasant cast to the manners of the man, and by that means, in an indirect way, to affect his success in life. In fighting out the mishap of such a nose, the most rational and modest of men can scarcely fail to become liable to a charge of affectation. By way of impressing a belief in his own temperance, he will always be talking severely and ill-naturedly of the intemperance of others. He will profess to hold every kind of liquor in abhorrence. He will always be taking or making opportunities of telling that he is a tee-totaller. He will ever be taking ill, things that were spoken in perfect simplicity, if he can by any means twist them into a supposed reference to his nose. When asked, for instance, the Latin for fish after dinner, he will imagine that he is judged from appearances to be well acquainted with that curious philological question, and will probably answer with a frown. When others are sipping what they think by no means likely to do them any harm, he will sit stiffly up with a cold taste-not-touch-not sort of air, enough to repress all natural flow of mirth in the company, though it were three times more numerous. In fact, he will be a horror and a bore, and, though the best man that any body knows, will become universally shunned. He will then grow misanthropical and fantastic, and people at last will point him out as one who once was a good fellow, but is now the most unsocial and disagreeable of mortals. To complete the deplorable picture, his nose burning on as bright as ever, he will, with all his affected puritanism, be suspected of being no better than his neighbours; and in the midst of the most starveling abstinence, he will be accused, like the poor porter in the Duenna, of constant swilling and gormandising, while they, like Father Paul, are absolutely "wasting in mortification."

The miseries of having a non-spontaneous red nose might be followed out into many special channels. We might show the great additional difficulties which it cannot fail to give rise to in one's advances to the

favour of a fair mistress—the tremendous obstacle which it may raise against one's success in any of the more demure professions, such as that of medicine—and its ruinous inconsistency with the hopes and whole character of a candidate, whose nose, in most cases, would need to be as white as his robes. Much also might be said of the still more poignant distresses which spring from the possession of an unintentional red nose amongst the fair sex. But we feel that the subject has already reached a degree of painfulness too great for either ourselves or our readers. We forbear, in pity for all parties. One word only let us say as to the spirit in which the calamity, when it occurs, should be considered. Turn it as we will, we see, in the non-spontaneous red nose, a perfect specimen of a natural evil. It comes we know not how, but no doubt in accordance with some law which, like all the other laws of nature, has a beneficial effect in the main. Perhaps, if the redness had not come out to the surface, it might have turned inwards, and had a more deadly effect. Perhaps it was designed as a beauty, but has only been perversely regarded by man as a deformity. Perhaps many who have noses of the ordinary complexion are visited with other ills, which more than compensate for their being free of this. If all other considerations fail, let us endeavour to bear the fate we cannot resist. Cure by all means if possible; but if we cannot cure, let us do the next best—endure. In the consciousness of firmly suffering irrepressible evils, and in the sense that our heroism is regarded with admiration by all around us, there is a solacement that almost extinguishes suffering. Let us take refuge in our magnanimity, and, showing to mankind that even an undeserved red nose may be borne patiently, let us hold forth that grandest of all spectacles, according to the heathen philosopher, an upright and virtuous mind bravely struggling with unavoidable distresses.

POPULAR INFORMATION ON SCIENCE.

ARTESIAN WELLS.

In a paragraph quoted into the Journal more than two years ago (in Number 205), it was stated that certain spouting fountains and wells, formed by boring the ground perpendicularly to various depths, received the name of Artesian wells, from the circumstance of their having been made extensively in the province of Artois, in France. In another paper, moreover, which appeared in a still earlier number, under the title Boring for Water, a minute account was given of the operation of boring, and of the instruments used in it. The general principles, however, on which the existence of subterranean water and the formation of wells depend, were not entered into on either of these occasions, and we propose at present to render our view of this subject complete, as it seems to us to be one equally interesting and useful. An admirable paper by M. Arago, in a late number of the Edinburgh Philosophical Journal, supplies abundant materials for this purpose.

The fact that water will rise spontaneously to and above the surface, in certain localities, when bores of various depths are made into the earth, seems to have been long known to mankind. An Alexandrian writer of the sixth century, narrates, that "when wells are sunk in the Oasis of the Desert, to a depth varying from one to five hundred ells, water springs from the orifices so as to form rivers, of which the farmers avail themselves to irrigate their fields." In more modern times, travellers relate, that, in some parts of the desert of Sahara, the natives sometimes bore the earth to the depth of two hundred fathoms, and always succeed in finding water, which flows often up the bores with such force as to drown those engaged in making the excavations. In China also, and in European countries, there are proofs of wells of this nature having been early formed. In many cases the water of these wells not only spouted to the height of several feet above the surface, but might be conveyed with ease in pipes to the tops of the highest houses. This spontaneous ascent of the water to and above the surface, is the distinguishing character, it will be observed, of Artesian wells—common wells being those in which the water, when found, does not rise of its own accord, but requires to be elevated artificially by pumps or buckets. Water, indeed, rises more or less in almost all wells, but the name Artesian is properly confined to those which present the first-mentioned characteristics. The stream of water ejected from Artesian fountains, occasionally continues uniform for years; but this, as will be seen from what follows, is a point liable to be affected by circumstances.

In considering the phenomena of these wells, one or two points chiefly require attention and explanation. Firstly, "Whence is the water of these wells derived, and where does it lodge itself?" And, secondly, "What is the power which causes the waters to rise, and projects them at the surface of the globe?" There have been various theories suggested relative to the source of the water found on boring into the earth at various depths; but M. Arago and others have now arrived at the conclusion, and indeed have demonstrated, that these subterranean founts are fed by the *waters of the atmosphere*. This seemingly natural explanation of the matter was long doubted, on grounds of much apparent plausibility and probability. The principal of these objections was, that rain never penetrates above a few inches (feet, according to some) into the ground. But the experiments which led to this conclusion were all made upon cultivated *vegetable earth*, and they would certainly be decisive, if the surface of the globe were covered with a layer of this earth, two or three yards thick. "The very reverse of this, however (says M. Arago), is the fact. Every one knows, that in many places the superior layer is sand, and that sand allows the water to percolate, as if it were a sieve; whilst in other places the naked rocks appear, and through their fissures and gaps the water runs most freely." In proof of this, the mines of Cornwall may be referred to, the deepest galleries of which have their standing water increased a few hours after a fall of rain. Rain, also, takes an immediate effect on the springs issuing from chalk-cliffs. Other objections to the belief that the waters found below the surface of the earth are derived from the atmosphere, are, in like manner as the preceding, capable of a satisfactory refutation.

It is into the stratified formations, or those masses of matter arranged on the surface of the globe in beds or layers, that the waters of the atmosphere infiltrate. The irregular or primitive rocks have few large fissures in them, and these not continuous or connected, and therefore water cannot gather in them in great quantities. The springs, accordingly, that are found in these irregular formations, are small, and, as it were, accidental. The stratified formations, on the other hand, are largely intermingled with layers of loose and permeable sand and chalk, which permit the infiltration of vast quantities of water. The order in which these stratified formations are usually disposed, greatly favours the admission of the atmospheric waters. These formations are in the shape of basins, their edges being turned up upon the sides of ridges, hills, or mountains. Their broken ends have thus a vertical position, and are comparatively open to the infiltration, into their permeable strata, of the rains that fall upon the heights. As not above one-third of the rain, snow, &c. that falls around any of these basins—to take the basin of the Seine, on which experiments were made, as an example—passes off by the agency of rivers, a vast quantity of water must evidently enter the earth. Of this water, part will go to nourish the vegetable soil, and part will reascend in vapour into the atmosphere, while the remainder will enter the permeable parts of the stratified formations. One would therefore expect to find extended sheets of water in these formations; to find great hollows, formed by the water passing down with velocity through the inclined strata into the horizontal ones, which must be the case particularly, where the dip is at a high angle; and even to find subterranean rivers amid these formations.

All this is really found, accordingly, to be the case. The chalk strata are furrowed in every direction by thousands of fissures. The caverns which occur amongst the stratified (limestone) formations, are extremely numerous, and of vast size—in some instances extending even for many miles. In all of these are found springs or streams, indicating the source by which these caves have been hollowed out. In the great cavern of Guacharo, in South America, there is a river, thirty feet broad, passing along the whole floor of the excavation. There are also amid the stratified formations, many immense subterranean lakes, one of the most remarkable examples of which is the Lake of Zirknitz, in Carniola, which is about six miles long by three broad. This lake is below a meadow, which has various openings or holes in it, through which the waters rise in the wet season, and cover the plain. That there is a regular subterranean lake here, is clearly proved by the ejection of living (but *blind*) ducks, fishes, &c., when the waters issue. This is most unquestionably an accumulation of water between two hard rocks, where it has found a site by infiltration, and by the displacement of some soft layer. There have, moreover, been found in one spot, successive sheets of water, at various depths, and which have collected in the same manner. Running streams have also been repeatedly observed in the stratified formations in various places.

More need not be said, we think, to exhibit the *source* of subterranean waters, the *manner* in which they descend into the earth, and the *position* which they there take up; all of which points have been here adverted to, because, without a clear comprehension of them, it is impossible to understand the true nature of Artesian wells. The waters, then, of these wells, have their site among the stratified formations, into the soft masses of which they have infiltrated from the surface. "What is the power which causes these subterranean waters to rise, and projects them at the surface of the globe?" This important point now remains to be explained. "If water (says M. Arago) be poured into a tube which is bent into the shape of the letter U, it there assumes a level, and maintains itself in the two branches at vertical heights, which are exactly equal. Let us suppose, then, that the left branch of this tube opens towards the top, with a large reservoir which can maintain itself always full; that the right branch is cut across towards its lower part; that only a short portion of its vertical part is left, and that this portion is fitted with a stopcock. When this stopcock is open, the water will be projected into the air, through the remaining portion of the right branch, to exactly the height it would have risen if this branch had remained entire. It will ascend as far as it has descended from the level of the reservoir, which, without ceasing, supplies the opposite branch." This is the grand hydrostatic principle upon which many cities (Edinburgh, for example) are supplied with water. An illustration of the manner in which artificial jets or spouts of water are formed, may be offered by supposing an opening to be made in the pipe that supplies Edinburgh, at that part of it which lies in the vale between the fount and the city. The water would spring to a height, great in proportion to the length of fall of the descending current. M. Arago thus applies these principles to the Artesian wells:—"Let us now recall to our recollection the manner in which the rain water penetrates certain beds of the stratified series; not forgetting that it is only upon the slopes of the hills, or at their summits, that these beds are exposed, on edge; that it is there they admit the water, which, therefore, always occurs in somewhat elevated situations: let us reflect, moreover, that these *water-carrying* beds, after having descended along the sides of the hills, extend themselves horizontally, or nearly so, along the plains; that there they are often imprisoned, as it were, between two *impermeable* beds of clay or hard rock—and we may then easily conceive the occurrence of subterranean waters, that are naturally in the same hydrostatic conditions of which the conduits leading to cities from a height along a vale, supply us with artificial models; and the sinking of a pit in the valleys, through the upper strata, down through the more elevated of the two impermeable beds betwixt which the water is confined, will form, as it were, the second branch of a pipe, in the form of the letter U—or, we might say, of a *reversed syphon*; and the water will rise in this pit to a height corresponding to that which the water maintains on the side of the hill, where it commences to descend. From these statements every one may understand how, in any given horizontal plane, the different subterranean waters which may be placed at different levels, may have very different powers of ascending; and also how the same water should be here projected to a great height, and should there rise no higher than the surface of the soil. Simple inequalities of the level would clearly appear to be the cause, and a sufficient as well as natural cause, of all these apparent anomalies."

We trust, that, by the helping hand of this great French philosopher, the reader has now a distinct idea of the causes of these wonders—and in many places most useful wonders—of nature, the Artesian spouts or wells. It is obvious, that a knowledge of this subject is calculated to be of exceeding value to the inhabitants of many regions of the globe. An examination of the strata of any district will lead almost unerringly to a right decision in the search for water, where the principles here detailed are kept in view by the investigators. It is true that where a common pump-well can be formed, it would be a waste of time to attempt the formation of Artesian wells, which are generally so much deeper; but in many quarters of the globe water is not to be had at common depths and by common means, and in these cases the attempt to penetrate the stratified formations, where judiciously done, might well reward the labour. The water is usually of extreme purity, as might be anticipated from the complete percolature it undergoes.

Waters have risen to the surface, in Artesian wells, from the immense depth of one thousand and thirty feet. One in the park of the Duke of Northumberland projects the water a yard above the surface, from a depth of five hundred and eighty-two feet. In many places on the continent, the water of Artesian wells is employed in *moving machinery*, and the supply, particularly when the water is from a considerable depth, is so equable, that no moving power could be superior in convenience. In this capacity, therefore, these wells might be of incalculable service in many quarters, in addition to their utility otherwise.

We shall conclude with one other remark. The *spouts of fresh water* which have been frequently observed to burst through the waters of the sea, are Artesian fountains. They have been noticed above one hundred miles from land, which well shows how extensive the sheets of water sometimes are which permeate the strata of the earth. This also shows, that,

when Artesian fountains are found where no high grounds are near, we are not justified in making this an objection to the hypothesis which refers them to water descending through the earth from a height.

THE BARRACK-YARD,

A STORY.

MISFORTUNES, which he had in part induced by his own imprudent, or at least incautious conduct, had thrown into deep distress the family of Mr Bruce, at the time when we are about to introduce them to the reader, as the parties in whose domestic history the following remarkable incidents took place. Mr Bruce was of Scottish origin, but had for many years been resident in England, being the pastor of a small Presbyterian congregation in the neighbourhood of one of the largest commercial cities of that portion of the island. The income which he enjoyed from his clerical office was small; and, unfortunately, being a cadet of a good family in the north, he had been bred with tastes and pretensions unsuitable to a limited revenue. To his own bitter cost ultimately, he had not strength of mind to abstain from the attempt to move in a circle for which his means were ill adapted, and his circumstances gradually became embarrassed. Instead of making an efficient pause when he saw this, he unhappily temporised, kept up a good face to the world, and in consequence, at the end of a number of years, felt himself wading in a sea of accumulated debts and distresses.

Leaving out of sight his foible of seeking society above him in fortune, Mr Bruce was an amiable man, of cultivated mind, and good understanding. While he had been creeping by degrees into pecuniary difficulties, his family, consisting of one daughter and two sons, had been advancing from childhood to maturity. When Mr Bruce's embarrassments became known, as of necessity they did, to his wife and family, William, the eldest son, was pursuing a profession in the neighbouring city. The second, James Bruce, a fine lad of seventeen, and of whom the only daughter was a twin-sister, was still at home, his education being just completed under his father's eye.

"Well, my children," said Mr Bruce one morning at breakfast, as he slowly laid down a letter which the post had just brought in, "the end fast approaches. And yet I feel more happy *now* than I did when comparatively unannoyed, and when you knew not the truth. I have now your forgiveness for having brought this upon you." All the family were present at this moment, and all of them had instinctively fixed their eyes on the ground during Mr Bruce's perusal of the letter, well knowing, from frequent experience, the probable character of the missive. But at her father's last words, Harriet Bruce sprang up and kissed his brow, exclaiming at the same time, "Dear father, it is we who require your forgiveness, for it was for our sakes that you struggled to keep too high a place in society." "Partly so, my dear, I admit," replied the father; "but how foolish was the conduct, whatever the motive might be, since the world's scorn must fall only with tenfold force upon you now! But this is not all, my children," continued Mr Bruce; "I have sinned in a heavier way, by injuring others—perhaps in some cases irrecoverably. What I—what we—for you must suffer through me—have to endure, is not unmerited; but what others may suffer, is not through their own doing or deserts."

The family were silent after this for a few minutes, until, after asking his father's leave, the elder of the sons lifted the newly arrived letter. He had scarcely glanced at it, when the exclamation "A jail!" burst unconsciously from his lips. Mr Bruce himself sat in silence; but his wife and children, into whose minds the idea of a jail had not yet entered, repeated the words in great agitation. The letter was the first which had plainly threatened that extremity. Even the sons could not refrain from abundant tears, as they cast their eyes on the grey hairs of their father, and thought of the imprisonment of him whom they had been accustomed to see all around him love and reverence. "Father," said William Bruce, "can this pressing debt not be settled?" "I have not enough, William, to discharge it; nor would it be just to others to do so, even if I had it," was the reply of Mr Bruce. "But if you have a part of the sum," rejoined William, "there can be no harm or injustice in offering it, as you would pay to this creditor a part, at all events, if the mode of successive small payments you are about to propose be assented to."

Not to dwell unnecessarily on this part of our narrative, suffice it to say, that it was agreed on to send a portion of his demand to the pressing creditor, and at the same time to request further time for the liquidation of the remainder. James Bruce was chosen to be the bearer of the money and the request. This youth had sat at the breakfast-table, during the conversation detailed, in silence and tearful meditation. Not one of them felt more deeply for the distresses of his father. When required to bear the message mentioned, he assented at once to his father's wishes, though the commission could not be pleasing to his spirit. There was no time, however, for the indulgence of personal feeling, for hesitation, or delay, as but one day was allowed by the creditor for the transmission of an answer. Within an hour, therefore, after breakfast, the youth left his father's house to proceed with the money to the neighbouring city, where the creditor in question dwelt.

James Bruce never returned again! The probable cause of this was but too apparent. In his walk between his home and the city, he had to traverse the banks of a canal, and on that canal, in the course of the day on which he left home, some portions of his clothes were found floating. Mr and Mrs Bruce knew them but too well to be their son's garments. In the pockets of the vest was found the money with which he had been sent to town. What had been the immediate cause of this sad event—whether, in short, he had been drowned in bathing or preparing to bathe, or had terminated his life voluntarily—it seemed impossible to say. The distressed family, for whom the greatest sympathy was excited, and who had help of every kind proffered to them in the search, caused the canal to be dragged carefully for the course of many miles, but without effect. The body was not seen.

Sorrowful was the home of the Bruces rendered by this catastrophe, befalling, as it did, one of the most beloved members of the family. But in other respects their situation might even be said to be benefited by this event. The sympathies even of the sternest creditors were awakened by their misfortune; and when the state of Mr Bruce's affairs became known, as it did immediately afterwards, to his friends and flock, the moment was one so instigative of compassionate feeling, that every one took an active interest in his affairs, and soon made an arrangement for him, which took him virtually out of all his difficulties. He was placed in a situation which required but the exercise of moderate economy to make him and his family as comfortable as they had ever been, although some empty luxuries were no longer at their command. Being justly sensible, as the reader may have seen by his words, of the culpability, not to mention the folly, of his former conduct, Mr Bruce steadily avoided the rock on which he had previously split. Perhaps, as he looked at the deep mourning—the visible symbol of unseen grief—in which he himself and his family were clothed, a motive, even stronger, for prudent conduct, suggested itself; for there could not but be in his mind occasionally a harassing fear about the mode of James's death. Yet, on mature reflection, Mr Bruce and his family, knowing the youth's principles, always came to the conclusion that accident must have caused his mysterious end.

Year after year, to the number of ten, rolled away after this period, and the family of the Bruces were still all of them in life. Some changes, however, had taken place in their situation. Harriet Bruce was now the wife of one with whom she had been familiar from infancy, and whom she loved the more, from his having been the dearest friend of her brother James. Mr Acland, as her husband was named, resided close by the dwelling of Mr Bruce, who still retained his clerical charge in the vicinity of the city formerly adverted to. Mr Acland being in excellent circumstances, it was in the daughter's power to contribute much to her father's comfort, and in the society of her children he found a perpetual source of pleasure. Things were in this condition, when one day Mr Acland rode into the city upon some business. After attending to more important duties, he went to the barracks, in order to pay his respects to one of the officers of the regiment stationed there. On entering the yard, he dismounted for this purpose from his horse, which was readily taken in charge by a soldier who was lounging near the spot; and Mr Acland then went into the officer's room. He was but a few minutes away, and on his return he was about to mount, when his eye caught the countenance of the soldier. It struck Mr Acland that the face was known to him, and it also seemed to him that an involuntary expression of recognition passed across the soldier's own face. "May I ask your name, friend?" said Mr Acland. "William Lumsden, sir," said the man at once; and he said it in so quiet and cold a manner, that the inquirer mounted his horse, muttering to himself "Nonsense! imagination!" and rode away.

But Mr Acland could not get the resemblance thus condemned as "imaginative nonsense," out of his thoughts; and the more he mused on the matter, the more firmly he became convinced that there was more than foolish fancy in it. At length he went to his brother-in-law, William Bruce, who was now a prosperous merchant in the city, and spoke to him on the subject. So positive was Mr Acland of the correctness of his first impression, that he did not hesitate to say, "William, I am firmly persuaded that your brother James Bruce is now living and in this city!" "Acland, do you know what you say?" was the reply. "I do, and believe it to be true." So saying, he mentioned the circumstance which had taken place at the barracks, and described the man. As there was nothing in the canal catastrophe positively contradictive of such a supposition, and as, indeed, from the non-discovery of the body, many persons had doubted the reality of his death, it was not difficult for Mr Acland to excite hopes in his brother-in-law's mind. It was agreed that they should immediately go to the barracks, saying nothing in the mean time to any one of the matter.

When William and Acland reached the barracks, they chanced to find the man they sought at the entrance of the yard. When Mr Acland pointed him out, William went up to him with considerable internal emotion, which was increased at the first glance. "What is your name?" said he. The soldier's lip quivered, and his cheek grew somewhat pale, but he replied, "William Lumsden." "No!" said William, extending his arms; "I am William Bruce, and you are my brother James!" The soldier struggled for an instant apparently to restrain himself, and then, bursting into tears, threw himself into the arms that were opened to receive him. Need we add, that the soldier was James Bruce?

A joyful meeting with a happy father, mother, and sister, all of whom loved the lost one dearly, followed this discovery. Ere long, James Bruce's military career ended; he was bought out of the service by his friends. And what, does the reader think, was the cause of all this?—what was the reason for his disappearance—for the mystery of his floating clothes on the canal? When the explanation was given, it increased greatly the love of his family for him, for he sacrificed himself for them. Believing and hoping that his father's creditors would be prevented thus by compassion and sympathy from continuing to press him, the youth had determined, in traversing the canal banks, upon throwing in a part of his clothes, to raise the supposition of his being drowned. He put this idea in force, and then, by a bye road, found his way to the city, where he sought out a party of recruiting soldiers (of whose existence he had previously been aware), and being a youth of tall person and fine appearance, was enlisted at once. On confessing that he had run off to be a soldier, there was no objection made (the service being then much in want of men), and he was sent off with a number of other recruits to the head-quarters of the corps on the following morning. Since that time, he had been in various places, and at last had come to the neighbourhood of his home, where he was discovered. He meant, he declared, to have revealed himself before leaving with his regiment for another place, but he did not intend to have left his corps and come home, lest the world should throw shame on his family, and say his departure was a thing of concert.

The world, however, was just and generous enough to do all parties justice in this case. The remarkable act and motives of James Bruce were indeed such as to arrest popular applause. But, lofty and generous as we must admit his intentions to have been, the act was still thoughtless and rash; for was not the pain inflicted on the family, by the thought of his death, a heavy price to pay for the advantage to be anticipated from it? Yet, let us not judge too harshly, but look at the *intention*, which wears the colour of a generous self-sacrifice. It must have been to him a great pleasure, on his restoration to his family, to know that his act had been productive of much of the effect anticipated.

We have now closed our story, and have only to say, that, with the exception of some unimportant alterations to spare the feelings of living friends, this story is true throughout. James Bruce is at this hour, we believe, a merchant on the other side of the broad Atlantic.

ESCAPE FROM ROTHSAY JAIL.

THE following anecdote, which appeared a few years ago in the newspapers, is worthy of preservation as a curious illustration of the maxim with respect to keeping a thing seven years in the hope of finding an use for it:—"A man of the name of Douglas was tried at Inverary for some petty depredation, and sentenced to twelve months' imprisonment in Rothsay jail. But the culprit had been accustomed to a roving life, and as his new quarters by no means accorded with his ideas of comfort, the thought soon struck him that it was possible to change them. His cell happened to be on what is called the ground-floor; and, in addition to a chair, table, and bedstead, displayed an old-fashioned rusty grate, which, for years on years, had to all appearance chased away no contiguous damp—emitted no cheerful blaze. From this grate he wrenched one of the ribs, or bars, and although the instrument was not above nine inches long, and one in diameter, he made so good a use of it, that, in the course of a very few hours, he fairly undermined the wall of his prison. The aperture, though small, enabled him to drag his body through; but after creeping out, he had the temerity to creep in again, and, from whatever motive, secreted the disparted portion of the grate in a corner of the yawning chasm above. Afterwards he found his way to Greenock, was allowed to work his passage in a vessel bound to North America, and remained in that country several years. Tiring, however, of the new world, he revisited Scotland; and in the hope, no doubt, that both his crime and his escape had been forgotten, ventured once more among the wilds of Argyleshire. The fiscal of the district, unaware, perhaps, of the man's return, or not deeming the matter of much importance, offered him no molestation at first; but he was soon caught in a new offence, and from necessity or oversight re-lodged in the identical cell he had broken. All the world have heard of Monsieur Tonson's witty tormenter; and as the first thing he did on his return from India was to ring the astounded Frenchman's bell, so our hero had no sooner been left to himself than he began to explore the area of the chimney in quest of an old and valued acquaintance, which had served him at a pinch, and might

do so again. And he found the instrument where he had left it! as fit for mining work as ever, and with fewer changes on its substance or surface than time and climate had made on his own weather-beaten frame. To work, therefore, he set a second time, and was again so successful, that he had his foot on the heath, and saw the sun rise on his native mountains, at an early hour on the following morning. As the circumstance excited a good deal of interest, diligent search was made for the Baron Trenck of the Isle of Bute; but it was all to no purpose. He escaped to a distant part of the country, and betook himself to more lawful courses, not having faith, it would appear, that good fortune would serve him so well a third time."

OCCASIONAL NOTES.

SINGULAR PRESERVATION OF A LIFE.

THE following anecdote of a life preserved under extraordinary circumstances, is related in *Varilla's History* (French) *of Charles IX.* The incident occurred at the siege of Rouen in 1562:—

"An accident which happened to the most daring and hardy of the besieged, deserves to be told. François de Civille, a young Calvinistic nobleman in the neighbourhood of Rouen, had entered that city before it was besieged, and had been appointed, by Montgommeri, to command a company of foot soldiers, with orders to guard a station between the gate of St Hilaire and les Fourches. In this place he was shot in the right cheek by a musket ball. The violence of the ball, which penetrated a long way into his head, threw him from the top of the ramparts down to the ground, where the pioneers were working at an intrenchment. These unfeeling men, too much familiarised with scenes of blood to be moved by pity, considered Civille as dead, or at least they imagined that he would very soon be so: despoiling him of his clothes, they paid themselves beforehand for the sepulture they were about to give him; and although he was but half dead, they cast him into a grave by the side of a soldier whom they were then interring. He had been buried six hours when the assault terminated. His groom, who was waiting *with his horse for him*, observing that he did not return, and hearing a confused rumour that he was dead, went to Montgommeri to ascertain the fact, who told him in what manner he believed Civille had been killed. The groom, much grieved, begged that at least they would show him the place where his master was buried, in order that he might take away his body, and convey it to his relatives. Jean le Clére, a lieutenant in the guards of Montgommeri, offered to show him the place. The night was very dark, and they durst not take a light with them, as the enemy would have fired at them immediately. However, the lieutenant had marked the grave so exactly, that the groom found the two bodies; but the wounds that they had received in the face, and the mud with which they were besmeared, had so disfigured them, that it was not possible to distinguish Civille from the other; thus the groom was compelled to replace them in the grave whence he had taken them. The danger to which he exposed himself in performing this melancholy duty, and the distraction of his mind occasioned by his singular adventure, allowed him to do it with so little exactness, that he left one of the arms uncovered. He returned, overwhelmed with grief; but as he was about to enter the street, and had lost sight of the spot where he had buried his master, he turned his head to look at it once more. The moon, which was rising, enabled him to perceive the arm lying out of the ground, and the fear lest it might allure the dogs to grub up the bodies and devour them, had so much influence over him as to induce him to go back for the purpose of covering the arm. In taking hold of it he found a ring on one of the fingers, which had escaped the observation of the pioneers, who had been in too great haste to make a particular examination. He recognised the diamond that Civille had been accustomed to wear; then unburied his master; and finding, on taking him up, that he was still warm, placed him on his horse, and conveyed him to the monastery of St Claire—the place destined for the wounded. The surgeons having examined Civille, deemed it useless to dress his wounds, and restored him to the groom, who, not knowing what to do, took him to the inn where he abode. In this place he remained four days without taking any nourishment, and on the fifth day, Grente and Le Gras, two celebrated physicians, having heard that he was still alive, went to visit him, more from curiosity than with any hope of being able to afford him relief. They forced his mouth open, cleaned his wounds, and discovered, on applying the first dressing, that nature had yet sufficient strength to recover, provided she were seconded by art: and, indeed, he began to recover, to the great astonishment of the inhabitants of Rouen. When that city was taken, some Catholic officers who had had a quarrel with the brother of Civille, ran to the inn where he had heard he resided. The persons who had informed them were mistaken, for the two brothers bore the same name. The intention of the officers was to kill their enemy; and their vexation when they found that he had escaped their revenge (for he had already left Rouen) was so great, that they wreaked their vengeance on his unfortunate brother. However, they were not willing to finish it entirely themselves, but commanded their servants to throw him through the window, which order was immediately executed. But nothing can take away the life of a man when his last hour is not arrived. Civille fell upon a dunghill that was unobserved by those who threw him through the window, and as their thoughts were only fixed on pillaging the room as speedily as possible, in order that they might hasten to do the same elsewhere, they put themselves to no more trouble about what was become of him than their masters had done, who had gone out after having given their order. He remained three days on the dunghill without receiving any nourishment, until his servant informed his relatives of what had happened to him. One of the most charitable of them, by means of a bribe, prevailed on the Catholic soldiers to remove him from that place, and to convey him to a country-house near Rouen, where he recovered, and lived almost fifty years afterwards."

This story appeals so strongly to the feeling of wonder, that the mind is almost disabled for forming a steady judgment as to its perfect naturalness. Yet, quite natural it must of course have been. The explanation is, that Civille experienced much of what seems usually to produce or attend death, but yet never received exactly that kind or amount of injury which is sufficient for the purpose. On the other hand, death is often produced from apparently trivial causes—sitting in a draught, or the cutting of a toe-nail. The uninformed mind, seeing some resist what appears so much, and others sink under what appears so little, are apt to think it is all a matter of fatality. If better informed on the subject, they would in every case find that the apparently small injury was in reality the greatest—the sitting in a draught, for instance, producing a general stoppage of one great function of the system, and the cut toe leading to such a derangement of the nervous apparatus that no other derangement could be equal to it. The same explanation serves for another too common wonder—the deaths of the young and strong, while the old and feeble linger on to old age. All depends on the acuteness of the injury. The feeble body, properly nursed and protected, will long retain life, if it escape severe attacks; while the healthiest and most robust frames are unable to stand against fevers, inflammations, and other short and sudden maladies. We have sometimes flung an useless piece of paper upon the coals, and been surprised half an hour after to find it not consumed; whereas, on other occasions, useful papers, flung in by mistake, have perished instantaneously. But, in the first case, the flame was just beginning to burst through the superior cake of black coal, while, in the second, the fire was glowing like a furnace. To suppose here a fatality against useful papers, would be exactly the same absurdity as to conceive that healthy lives ever give way before injuries less severe than those which feeble lives are enabled to endure.

PICTURE OF SYDNEY.

A SMALL duodecimo, under this title, descriptive of the capital of New South Wales, and bearing date from the present year, has just been put into our hands. It is published by J. Maclehose, Hunter Street, Sydney, and for typography, embellishment, and binding, would do credit to any provincial bookseller of our island. The volume is embellished with forty-three engravings, the first being a neat and accurate-looking map of Sydney. Many who are not reflecting on the progress of colonial Britain, would be astonished at the extent of this town, which cannot be less than two miles long, and at the handsome appearance of many of its public buildings, as delineated in this publication. The work opens with a chapter on the subject of greatest interest to the colony—*Immigration*, from which we learn, amongst other particulars, that a project has recently been started for introducing, as an aid to the colonists, "the hill-labourers of India, whose readiness to emigrate on reasonable terms, and whose general utility, have been proved in their transfer to other countries." The next section of the book is one of *Historical Memoranda*—amongst which we find a colonial piece of wit ridiculing the late Governor Macquarie for the delight he took in fixing his own name to every thing that required a name in the colony. "Dr Townson was on some occasion entertaining a party of visitors at his residence, by showing them his well-stocked garden and orchard. One of the party, observing an insect on one of the trees in the grounds, asked the doctor, who was an eminent naturalist, what its name was. The doctor replied, with the utmost gravity, 'It is a species of bug that abounds in the timber of the colony. It has not yet got a name; but I propose that it should be called *Cimex Macquarieanus*, or the Macquarie Bug.'"

The streets of Sydney form the subject of the next chapter. Eleven are longitudinal, or run with the length of the town; George Street, the principal one, being 10,000 feet or nearly two miles long. Thirteen latitudinal or cross streets are enumerated. An idea may be formed of the advanced state of this town, from the fact, that, to improve one of these streets, which was at one place too steep, a cutting was effected in it last year, by which a million cubic feet of earth and rock was taken from the height, and placed in the hollow, so as to form a gently inclined plane. Another striking circumstance of the same character is mentioned in this book. The site of the town was at first ill chosen with respect to the supply of water. It was therefore found necessary to commence, in 1827, the excavation of a tunnel underneath the adjacent high grounds, in order to obtain a rill of that indispensable element from a neighbouring lake. This tunnel has now been finished. It is *two miles and a quarter in length*, and has mostly been cut through solid rock! We know few towns of the same size in the mother country where such a piece of work would have been ventured upon. As another proof of the progress of things in the colony, the neighbourhood of Sydney is beginning to be studded with very handsome villas, many of them erected and occupied by merchants. But indeed we have learned from other quarters, that in this town, which so lately as 1809 was only a kind of village, the elegances of life now abound as much in a certain class of its society, as in any town of similar extent in her majesty's home dominions.

We next come to the public buildings. First, with regard to places of worship, there are two churches for the Episcopal communion, St Philip's and St James's; while a cathedral has recently been commenced for the bishop of Eastern Australia, the cost of which is estimated at no less than L.40,000. There are two Scots kirks, a Catholic chapel, two Wesleyan chapels, an Independent chapel, a Baptist chapel, a Friends' meeting-house, and a Jews' synagogue. All of these appear, from the engravings, to be neat and tasteful structures. The educational institutions are upon a most respectable scale. The Australian College is a large elementary school, where English, the classics, French, mathematics and natural philosophy, and drawing, are taught by various masters, besides writing and arithmetic. Here the fees are L.6 a-year for the English elementary class, and L.12 when all the various branches are taught—board under nine years of age L.25, above nine years L.30, above twelve L.35. The *Sydney College* is a comparatively advanced school, where there are classes under distinct masters, for, 1, Latin and Greek; 2, English grammar, elocution, and the elements of English composition; 3, writing, arithmetic, book-keeping, geography, and drawing; 4, mathematics and natural philosophy. To these two institutions, all classes of religious thinkers are admitted, "no religious book being used by authority, except the Bible without note or comment." There is still another school of recent date, entitled the *Normal Institution*, where the dead languages are allowed only a subordinate place, and where "the training of the physical frame is considered an important part of the pupil's education;" dancing and gymnastic exercises being accordingly in vogue. The buildings for the legislative council and assize courts are of elegant aspect and spacious dimensions. The Barracks, Fort Macquarie, Fort Philip, Dawes's Battery, &c., are perhaps useful structures, but call for no particular notice. Of banks there are four—the Bank of New South Wales, established in 1817, with a capital of L.200,000; the Bank of Australia, established in 1825, with a capital of L.220,000; the Commercial Bank, established in 1835, with a capital of L.300,000; and the Bank of Australasia, established in 1836, with a capital of L.400,000. All of these establishments appear to be elegantly housed. It is scarcely necessary to mention that there are other banks in the colony.

Of the Post Office of Sydney we shall only remark, that it is more handsome than that of the city of Glasgow. A splendid suite of markets, an asylum for the poor, and establishments for prisoners and convicts, complete the list of the public buildings, except the theatres, to which we must advert more largely. Not much above twenty years since, the only theatricals of Sydney were practised "in a small loft on the Brickfield Hill, now crumbled into dust." In 1826, a theatrical attempt was made in Sydney Gaol, the stage being the Debtors' Room, while a few of the town's people would survey the scene through the gratings. No regular or licensed theatre was fitted up till 1832. On the 26th of December, that year, under favour of the governor's licence, a Mr Levey opened a neat small theatre in the saloon of the Royal Hotel, when the performances were *Black-eyed Susan* and *Monsieur Tonson*. This speculation succeeded. For two seasons the place was crowded every night, and the manager realised considerable profits. He then removed to a new and larger house, which bore the name of the "Theatre Royal, Sydney," and which was "handsomely fitted up with a neat circle of dress and private boxes, an upper tier of boxes, a gallery, and a spacious pit;" the house being capable of drawing L.130 a-night. The company was now acquiring experience and new members, and its popularity consequently increased. Gentlemen named Meredith,

Simmons, and Knowles, are spoken of as having successively wielded the managerial sceptre. Not satisfied after all with the house opened so recently, the proprietor has, since 1836, built a larger and more splendid theatre, which our author describes as not unworthy of the Great Babylon itself, its measurements being 100 by 53 feet, while the front is of great architectural elegance. The cost of this building is L.8000, and its rent is to be L.1000. In short, the drama has rushed up astonishingly in Sydney. The author of the Picture says, "If these stray leaves and this honest story should meet the eye of any poor Dunstable actor who has the talent of the renowned Manager Strut, let him cut his engagement; pack up his sundries, if he has any; bring a letter of introduction and recommendation from some London manager, and report himself (and if he has a theatrical wife and family, so much the better) to the London Emigration Committee, and come over the rolling wave to settle amongst us; for we can safely assure him that he will receive a good salary. His talent, if he has a good share of it, will render him a favourite with the public, and correct conduct will secure him many private friends and a good benefit—and an overflowing house will be the reward of his exertions." It does not appear that the *Old Theatre*, as the one built in 1833 is called, is to be given up, so that there will be two theatrical companies for the future in this town, which six years ago had none.

The production of wine is an interesting matter of consideration in Australia. "Had New South Wales," says the Picture of Sydney, "been the colony of a vine-growing country, wine and fruit would have been, years ago, among the staple articles of our export; while at present not above 1000 gallons of tolerable wine are annually produced in the colony. The climate is dry and warm: none in the world can be more genial to the growth of the vine, or more favourable to the production of that juice which so gladdens the heart of man. The soil is as various as that of Europe, from the most barren to the most productive. Here we have the *débris* of the primitive granite, the fertile soil resulting from the decomposition of volcanic trap, extensive tracks of lime, unmeasured extents of drift land, proceeding from the decomposition of sandstone, equally extensive portions of country consisting chiefly of alumina, and rich alluvial recent deposits, which to a great extent occur on the banks of our rivers; in short, we have soils in almost every possible variety, which influence the quality of the wine to a greater extent than is generally supposed. We may, therefore, expect to produce wines of equally various qualities. Some may have the roughness of port, some the aroma of Burgundy, others the lusciousness of Cyprus or Syracuse, others may partake of the dryness of Amontillado, or the endurance and flavour of Hock, or the sweetness of Lacryma Christi: in short, we may produce every possible variety resembling the wines of Europe, from the weak northern products of the Rhine, to the rich generous wines of the south. The demoralising influence and the disorganising tendency of spirits as a beverage, are ever before us, both by precept and example; and no town in the world exhibits more vivid living examples of the dire consequences of its use, than the streets of Sydney. A check has been proposed, however, to the progress of this ruinous vice, by some temperate and philanthropic men, who have mutually agreed to abandon the common use of the product of the still for that of the press; and associations exist here, as in many other countries, of which the members meet periodically for the purpose of drinking wine as a solemn religious duty. Books on the culture of the vine are already in the hands of the colonists, whereby that, and the process of making wine (from the use of which such evils are less apt to flow), are shown to be exceedingly simple; and grape vines imported by Mr Bushby, from which the most esteemed wines of France are produced, are now growing in the colony, and cuttings of them may be had gratis at the Government Gardens. Under these circumstances, it is wonderful how very little the culture of that useful plant, with a view to its vinous product, has hitherto been attended to in this country. Perhaps the inferior quality of the product of the vineyards at the Cape of Good Hope, deters many from attempting the culture of the grape here: but that ought to be no reason, when it is known that the greater part of the wines already grown in the colony, are far superior to the generality of those of the Cape. On this account, we are induced to notice particularly the very superior quality of the wine of Irrawang Vineyard, on the River William. It is yet of very limited extent, only a few acres which have been trenched about three feet deep. The soil consists of sandy black loam, with a subsoil of a lighter-coloured earth, intermixed with clay and gravel. Both the soil and the aspect, which is northerly, were approved of by the late Mr Shepherd, the most competent judge in the colony. The vines have grown luxuriantly in this vineyard these five years past, and borne abundantly. The white wine of vintage 1836, which was made and preserved with care (but without the addition of brandy or any other drug), resembles high-flavoured Sauterne. Some of it was bottled last winter in the cellars of a respectable firm, wine merchants, in Sydney. A few gentlemen, connoisseurs, then tasted it; some considered it resembled Hock, others Moselle; some supposed it to have the flavour of Barsac, but it was generally considered to approach nearest to Sauterne. Without reference, however, to any other wine, all were of opinion that it was a sound, light, high-flavoured, pure wine, and an agreeable beverage in a warm climate, which would be greatly improved by age, and could not fail to be much esteemed by those whose tastes had not been vitiated by the use of spirits, or the vulgar brandied wines of Portugal. The red wine of the same vintage was equally sound, and resembled Bourdeaux, in colour and flavour, but had not remained long enough in wood to develope its bouquet."

BIOGRAPHIC SKETCHES.

ROBERT FULTON.

ROBERT FULTON, one of the most deservedly famous of modern engineers, was born in the town of Little Britain, state of Pennsylvania, in the year 1765. His family, though respectable, was not opulent, and the patrimony which fell to him as the elder of two sons, on the death of the father in 1768, was very small. He received his early education in the town of Lancaster, and displayed, even from childhood, a strong taste for those pursuits in which he afterwards acquired celebrity. All the intervals of study, dedicated usually by boys to play, were spent by young Fulton in the workshops of mechanics, or in the employment of his pencil; and by the time he had reached the age of seventeen, he had become so skilful in drawing, as to obtain considerable emolument by painting portraits and landscapes in Philadelphia, in which city he remained until he came to his majority.

In 1786, Fulton went to his native district to visit his mother, and had the pleasure of purchasing for her, with his earnings at Philadelphia, a small farm, which greatly increased her comforts for the remainder of her life. Having effected this labour of love, he set out to re-establish himself at Philadelphia, but met some gentlemen by the way, who were so much struck with the productions of his pencil, as to advise him strongly to go to England, assuring him that there he would obtain the patronage of his countryman, Benjamin West, then in high favour as a painter with the British public. Fulton followed the counsel thus accidentally given to him. At the age of twenty-two he crossed the Atlantic, and presented himself before Mr West, who received him with the utmost kindness, and installed him at once as an inmate of his own family. Here Fulton continued for several years, practising the art of painting under the eye of his friendly entertainer. Owing to the loss at sea, some years afterwards, of a number of his manuscripts, it is not accurately known for what reason the subject of our memoir gave up the profession of an artist for that of an engineer. It would appear that he went to Devonshire in the character of a painter, and spent two years there, during which time he became known to the Duke of Bridgewater, of canal celebrity, and to Lord Stanhope, a nobleman famed alike for eccentricity and mechanical genius. The formation of such acquaintances possibly led to the alteration in Fulton's views for the future. Whatever might be the cause, we find him, from the year 1793 downwards, devoting apparently his whole mind and time to improvements in the mechanic arts. In the year mentioned, he engaged actively in a project to improve inland navigation, and in May 1794 he obtained from the British government a patent for a double inclined plane, to be used in transporting canal boats from one level to another, without the aid of locks. In the same year he submitted to the British Society for the Promotion of Arts and Commerce, an improvement on mills for sawing marble, for which he received an honorary medal, and the thanks of the society. He also obtained patents for machines for spinning flax and for making ropes, and invented a mechanical contrivance for scooping out the earth, in certain situations, to form the channels for canals or aqueducts. To conclude the account of his labours at this period in England, he published, in 1796, his Treatise on Canal Navigation, to which he appended his name as a professed Civil Engineer. This work, it was admitted by all, contained many ingenious and original thoughts on the subject of which it treats.

Whether these fruits of his genius were productive of much emolument to Mr Fulton, does not seem to be well ascertained. In the year following the publication of his treatise, he left England and went to Paris, where he took up his residence with a distinguished countryman of his own, Mr Joel Barlow. The objects to which Fulton's mind chiefly directed itself, during his seven years' stay in France, were of a remarkable cast. Under the impression, that, while individual countries maintained standing navies, the seas could never be the scene of secure and peaceful commerce, "I turned (says he) my whole attention to find out the means of destroying such engines of oppression, by some method which would put it out of the power of any nation to maintain such a system, and would compel every government to adopt the simple principles of education, industry, and a free circulation of its produce." This explanation refers to his schemes for destroying ships of war, by passing explosive machines secretly beneath them. After several fruitless attempts to call the attention of the French and Dutch governments to his plans for this purpose, Fulton was at last successful in inducing Bonaparte, in the year 1801, to appoint a commission with the view of inquiring into the practicability of his designs. Having gone to Brest, accordingly, Mr Fulton there exhibited his machines. One of these was a plunging boat (called by him a Nautilus), made water-tight in part, and otherwise so constructed, that, with three companions, the inventor could remain in it for four or five hours at the depth of many feet *below the surface of the water*, and could there propel it from place to place with great ease, without a ripple being seen above. At the same time, the Nautilus could sail as readily above as beneath the water, its sails being struck when the plunge was made. The other machine was named by the inventor a Torpedo, and was merely a submarine bomb, which could be exploded in water. Mr Fulton showed to the commission these engines in actual operation, by remaining for hours in the water, and shifting from place to place in the Nautilus, and by blowing a shallop to atoms with the Torpedo. He made it clear, that, with a little flotilla of these engines, a vast fleet, under favourable circumstances, could be blown in pieces into the air.

After these experiments were made, an opportunity was sought of trying their effect on some of the British vessels then hovering around the French coasts. No proper chance, however, presented itself, and the French government became tired of the matter. At this juncture, the British ministry, who had heard with some alarm of Mr Fulton's projects, made proposals to him to give his services to Britain. Sincere in his belief, that, wherever put in force, his inventions would ere long bring to an end the war-system of Europe, Mr Fulton conceived himself at liberty to accept of the invitation from the British government. He went to London in May 1804, but his journey was productive only of disappointment. In the single opportunity afforded to him of trying his machines on French vessels, they failed of success. The British ministry also changed members, and in 1806 Mr Fulton sailed for America. It is impossible to regret, for his own sake, that such was the issue of these schemes of destruction, though, at the same time, we are firmly of opinion that his motives were pure, and that his anticipations would have been ultimately fulfilled. This notice of Fulton's explosive inventions may be closed, by mentioning, that he endeavoured afterwards to apply the same engines to the defence of his native country, but did not succeed in extracting from them any practical benefit.

We have now to notice the great achievement of Fulton's life. For many years previous to this period, his attention had been turned to the subject of navigation by steam, as is distinctly proved by the following passage of a letter to him from Lord Stanhope, of date October 7, 1793:—"Sir, I have received yours of the 30th September, in which you propose to communicate to me the principles of an invention, which you say you have discovered, respecting the moving of ships by means of steam. I shall be glad to receive, &c." But although this letter shows Fulton to have formed plans for steam navigation much earlier than many persons had done, who afterwards sought to wrest from him the merit which was his due, the application of steam to the propulsion of vessels on water had been suggested long before, by Jonathan Hulls, in a little work published at London in 1737. Though this person's description of the machine invented by him is amazingly clear, and though he took out a patent for it, the attention of the world does not appear to have been arrested to the subject. The idea dropped aside for more than fifty years. About 1785, Patrick Miller, Esq. of Dalswinton, in Dumfriesshire (a gentleman who had made a fortune by banking, and bought that estate), made experiments with a double vessel driven by paddle-wheels. The tutor of his children, James Taylor, a native of Leadhills, in Lanarkshire, and a man of much mechanic ingenuity, suggested the application of the steam-engine to Mr Miller's paddled vessel; and the consequence was, the preparation of a vessel, having a small steam-engine on the deck, which was launched on Dalswinton Lake in October 1788—the first vessel of the kind, there is every reason to believe, ever put into operation in the world. A clever mechanician named Symington, an early friend of Taylor, was the person to whom the fitting up of this vessel was entrusted. Afterwards, at the expense of Mr Miller, and under the superintendence of Mr Taylor, Mr Symington made another vessel, which was tried on the Forth and Clyde Canal, in December 1789, with such complete success, that, but for the injury done to the banks, it in all probability would never have been taken off. The disgust of Mr Miller with the expense of this experiment was the means of withdrawing him and Taylor from the pursuit of an interesting object, which was then followed up for some years by Symington alone. It has always been asserted that Mr Fulton, when on a visit to Scotland, saw and examined a boat made by Symington, which was lying in a dismantled state on the banks of the Forth and Clyde Canal. However this may be, it is certain that the first decisive experiments of the same nature, made by Fulton himself, did not take place until the year 1803, when he was resident in Paris. In the intervals which his Torpedo schemes at that time allowed to him, he prosecuted ardently the subject of steam navigation, in concert with the American ambassador, Mr R. Livingstone. In July of the year mentioned, their first experimental boat, which was sixty-six feet long

by eight feet wide, and was driven by wheels, was launched on the Seine, in presence of the members of the French Institute, and a great concourse of spectators. The boat moved slowly, but in other respects the experiment was perfectly satisfactory, and Messrs Fulton and Livingstone resolved to carry the same principles into practical operation, as soon as they met in their native country.

Fulton went to England, as has been related, and did not reach America till the year 1806. Previously to that time, Mr Livingstone had got an act passed by the legislature of New York, granting to himself and Mr Fulton the exclusive privilege of steam navigation in all the waters of the state, for the term of twenty years. Though they passed this statute, the senators of New York actually regarded it as a mere delusion, and made it a standing jest for more than one session. Similar feelings of scorn and derision pervaded the minds of the American public at large. Notwithstanding this, Fulton, immediately on his arrival in New York, began the construction of his steamboat. The expense proved to be great, and he was compelled to offer a share of the prospective advantages to some of his friends, with the view of getting pecuniary aid in the mean time. No man would accept his offers. "My friends (as he himself relates) were civil, but shy. They listened with patience to my explanations, but with a settled cast of incredulity on their countenances. I felt the full force of the lamentation of the poet,

> Truths would you teach, to save a sinking land,
> All shun, none aid you, and few understand.

As I had occasion to pass daily to and from the building-yard while my boat was in progress, I have often loitered, unknown, near the idle groups of strangers gathering in little circles, and heard various inquiries as to the object of this new vehicle. The language was uniformly that of scorn, sneer, or ridicule. The loud laugh rose at my expense, the dry jest, the wise calculation of losses and expenditure, the dull but endless repetition of '*the Fulton Folly.*' Never did a single encouraging remark, a bright hope, or a warm wish, cross my path."

In spite of this painful discouragement, the boat was completed in August 1807. To continue his own affecting language, "The day arrived when the experiment was to be made (on the Hudson river). To me it was a most trying and interesting occasion. I wanted some friends to go on board to witness the first successful trip. Many of them did me the favour to attend, as a matter of personal respect; but it was manifest they did it with reluctance, fearing to be partners of my mortification, and not of my triumph. I was well aware that, in my case, there were many reasons to doubt of my own success. The machinery was new and ill made, and many parts were constructed by mechanics unacquainted with such work; and unexpected difficulties might reasonably be presumed to present themselves from other causes. The moment arrived in which the word was to be given for the vessel to move. My friends were in groups on the deck. There was anxiety mixed with fear among them. They were silent, sad, and weary. I read in their looks nothing but disaster, and almost repented of my efforts. The signal was given, and the boat moved on a short distance, and then stopped, and became immoveable. To the silence of the preceding moment, now succeeded murmurs of discontent and agitation, and whispers and shrugs. I could hear distinctly repeated, 'I told you so—it is a foolish scheme—I wish we were well out of it.' I elevated myself on a platform, and stated that I knew not what was the matter; but if they would be quiet, and indulge me for half an hour, I would either go on or abandon the voyage. I went below, and discovered that a slight maladjustment was the cause. It was obviated. The boat went on; we left New York; we passed through the highlands; we reached Albany! Yet even then imagination superseded the force of fact. *It was doubted if it could be done again, or if it could be made, in any case, of any great value.*" Well may Mr N. P. Willis, in quoting this letter of his distinguished countryman,* exclaim, "What an affecting picture of the struggles of a great mind, and what a vivid lesson of encouragement to genius, is contained in this simple narration!"

Other descriptions of the first voyage of the Clermont, as the steam-boat was named, are scarcely less interesting than the builder's own. Pine-wood was the fuel used, and the ignited vapour from this substance rose many feet above the flue, sending off an occasional galaxy of sparks to a great height, so that those who saw the boat returning at night, at the rate of five miles an hour, could only conceive her to be a monster moving on the waters, defying the winds and tide, and breathing flames and smoke. It was even said that the crews of the ordinary vessels on the river hid themselves under decks, and fell to their prayers. But the good people on the Hudson ere long became familiar with the spectacle, for the Clermont soon began to travel regularly, as a passage-boat, between Albany and New York.

Thus for the *first time*, most certainly, was steam navigation made effectually conducive to the common purposes of life, by the genius and perseverance of Robert Fulton. He soon afterwards took out a patent for his inventions in navigation by steam, but all his exertions could not save him from the encroachments of others on his rights. A series of vexatious lawsuits was the consequence, by which his life was long embittered, and his fortune impaired. In 1811, Fulton built two steamers, as ferry-boats for crossing the Hudson. It was in the succeeding year that the example he had set was followed by Mr Bell of Helensburgh, who launched a steam-vessel on the Clyde, the first used for the service of the public in the old hemisphere. Various steam-boats were about the same period built under the directions of Fulton, for the navigation of the Ohio, Mississippi, and other waters of the United States. He also gave his valuable assistance to the construction of the Erie canal and other public works. When war was declared between Great Britain and the United States in 1814, Mr Fulton again directed his attention to the subject of Torpedoes, submarine guns, and other instruments of the kind, but none of his schemes were ever brought into practice. He erected, however, a steam ship of war (named Fulton the First), of such size that several thousand men might parade on her deck, and capable of throwing an immense quantity of red-hot shot from her numerous port-holes. But when the engineer of this magnificent structure had nearly seen it completed, he was removed from his country and friends. Having exposed himself too long on the deck of his steam-frigate, in bad weather, he was seized with a severe pulmonary affection, and died on the 24th of February 1815.

In person, Mr Fulton was tall and well proportioned. He was a man as excellent in his private as in his public character, being generous, affectionate, and humane. To *him*, rating his deeds even as low as his worst detractors would make them, the human race owes much. The waters of half the world are now covered with models of that splendid machine, which, thirty years ago, he set afloat on the waves of the Hudson; and the journey between the Old and New Worlds is, by the same means, made now a pleasure-trip of a few summer days.

* In a very interesting work, entitled "American Scenery," now publishing in numbers in England, which gives, at a moderate expense, an excellent idea of the beautiful and magnificent of the United States. The letter-press is by Mr Willis.

FRIVOLITIES OF THE FRENCH NATION PREVIOUS TO THE REVOLUTION.

"Bread, and Theatres," was once the motto of the Roman people; and such, apparently, was long that of the French. This may be inferred from an ordinance of the police, made April 14, 1784, and proclaimed by sound of trumpet. At the very instant when the Parliament of Paris was making remonstrances on the dearness of flour, and the immediate necessity of giving bread to the innumerable famished poor, the government carefully watched over the pleasures of the populace. In an ordinance which relates to merry-andrews, pantaloons, rope-dancers, and other exhibitors in the Boulevards, or environs of Paris, it is declared, that these amusements, being made for the people to refresh them from their labours, and prevent the dreadful effects of idleness and intemperance, it is necessary to put them at a rate which does not exceed their ability. The managers of these facetious personages are forbidden to raise their first seats to a higher price than three livres; their second to twenty-four sols; their third to twelve; and their fourth to six.

In January 1769, an important cause was brought forward in their highest court of judicature. It was an action instituted by the ladies' hair-dressers of Paris, against the corporation of master-barbers. It is probable that some able pleader amused himself in drawing up the curious memoir that was published on this occasion, which every where discovers the playful hand of a master. In his first division, the orator, speaking for his clients, maintains that the art of dressing the ladies' hair is a liberal art; and boldly ventures to compare it with poetry, painting, and sculpture. "By those talents," says he, "which are peculiar to ourselves, we give new graces to the beauty who is sung by the poet; it is when she comes from our hands that the painter and the statuary represent her; and if the locks of Berenice have been placed among the stars, who will deny that, to attain this superior glory, she was first in need of our aid? A forehead more or less open, a face more or less oval, require very different modes; every where we must embellish nature, or correct her deficiencies. It is also necessary to conciliate with the colour of the flesh, that of the dress which is to adorn it. This is the art of the painter. We must seize, with taste, the variegated shades, and, by a just distribution of light and shadow, give more spirit to the complexion, and more expression to the graces. Sometimes the whiteness of the skin will be heightened by the auburn tint of the locks, or the too lively hue be softened by the greyish cast with which we tinge the tresses."

This important trial was crowded by a most brilliant assemblage; and when the grave decision of the court was finally made in favour of the ladies' hair-dressers, it was approved by a sudden clapping of hands from the anxious beauties of Paris, who considered the affair as of the first national consequence.

In September 1769, an exclusive privilege was obtained to supply silk umbrellas, for those who felt themselves incommoded by the heat of the sun, as they walked over the Pont Neuf! Offices were erected at the extremities of this bridge, where such dandies as were fearful of spoiling their complexions, provided themselves with one of these light and useful machines, which they left at the office on the other side, paying two liards. It will be acknowledged that the projector of this undertaking was profound and sublime in his national views; and, surely, the government was not inferior, when they granted him their *letters patent* for these *umbrellas!*

Among the various extravagances of French fashions, was the singular one, of wearing square hats, or hats with four points, which prevailed in 1776. This grotesque covering was used by the young fops for their morning dishabille. Shortly afterwards, some innovators introduced hats with two points; these, however, did not generally succeed: yet the Duke de Richelieu dismissed his valet, because he gave him a hat with four points, instead of two. The English slouched hats at length prevailed. All these fashions existed in the course of one year. In 1780, the fashionable folly consisted in wearing two watches; and the Duke de Richelieu, having a pair which flamed with precious stones, a sycophant entreated permission to admire them. The awkward courtier, however, dropped one on the floor; and in attempting to save it, let fall the other. The fragile trifles were thus ruined, and he stammered out a thousand apologies. "Do not be uneasy," cried the duke; "I never before saw them *go so well together.*"

In 1786, reigned the mania of buttons: they not only wore them of an enormous size, as large as crown pieces, but with miniature portraits, and other pictures; so that a set of buttons was often valued at an incredible price. Some of these gay fellows wore the modest medals of the twelve Cæsars; others, antique statues; and others, the metamorphoses of Ovid. Some young men imitated the romantic fancy of the ancient knights of chivalry, and wore on their buttons the cypher of their mistress; and the Parisian wits exercised their puny talents, by forming with the letters of the alphabet insipid rebusses. In short, the manufacture of buttons was a work of imagination, which wonderfully displayed the genius of the artist, as well as the taste of the purchaser, and afforded an inexhaustible source of conversation.

To this fashionable extravagance succeeded, in the same year, that of the waistcoats. These became a capital object of luxury in dress, and were purchased by dozens. They exhibited the fancy of the wearer by their fine paintings, and were enriched with the most costly ornaments. Among the variety of subjects they offered to the eye, were a number of amorous and comic scenes; grape-gatherers, hunters, &c., ornamented the chests of the dandies; and the front of an effeminate trifler was occupied by a regiment of cavalry: one had a dozen waistcoats painted so as to represent the finest scenes in Richard Cœur de Lion, and the reigning operas of the day, that his wardrobe might become a learned repository of the drama, and perpetuate its most felicitous passages!

These anecdotes exhibit such extreme levity, and frivolous refinement, that in an Englishman who has never travelled out of his own neighbourhood, they must excite not less surprise than contempt.

The national levity was insensibly declining about the time of the American war. In 1782, a writer describes the ladies as being *Anglomanes;* and, indeed, after the splendid victory of Rodney, the fashionable female Parisians wore bonnets *à la Rodney.* For the vanquished voluntarily to exhibit the honours, and thus to rejoice in the advantages, of the enemy, is a curious fact in the history of human nature, and an instance of the most singular levity. Indeed, about this time the French were gradually giving up their own for English manners; and an idea of the excellence of the British government was rapidly advancing among the people. The court considered this as only a temporary levity in the nation, which would pass away like its former ones. But liberty was insensibly acquiring a form and a voice.

The influenza spread about this time, and that also gave rise to a fashionable dress. The hats and bonnets of the frivolous Parisians were all *influenzas.* The Count de Vergennes, in a conversation, was describing the singularity of this epidemic disorder, and said, it was called the Russian malady, because it first appeared at Petersburgh. "We are threatened," observed a duchess present, "with another malady, which will come from America." "What is that, madam?" interrogated Vergennes. "The Independanza," replied the lady; "I am informed that our troops in that country are delighted to learn, that every soldier may hope to become a general, if he discovers any talents for war; that the Americans acknowledge no distinction of nobility and rank, and that all men are equal. This infinitely pleases the French: when they return home, they will dwell with rapture on these events; they will tell their relations and friends all they have seen, and in what manner men become independent; they will then teach here what they have learned there." The duchess was right.—*From the Pocket Magazine, or Elegant Repository, for the year* 1794.

THE ENGLISH LANGUAGE.

The difficulty of applying rules to the pronunciation of our language may be illustrated in two lines, where the combination of the letters *ough* is pronounced in no less than seven different ways, namely, as—*o, uf, of, up, ock, oo,* and *ogh.*

Though the tough cough and hiccough plough me through,
O'er life's dark lough my course I still pursue.

THE CAROUSALS OF COUNT BARANOFF.

[The following droll account of a visit to Count Baranoff, the governor of a small Russian fort on the west coast of North America, is given by an anonymous writer in the New York Mirror, and is too good to be allowed to remain unknown to British readers.]

THERE are some incidents in our lives which seem to elude the ebb of time, and, in spite of the whirlpool of more interesting events which sweep around our memory, remain fresh and unimpaired. Such are the recollections of my first *prosnick*, or drinking-feast, with Count Baranoff, governor of the Russian possessions on the north-west coast of America.

In the beginning of April 1814, the few Americans belonging to Mr Astor's company left Columbia River, in the brig Pedler, bound for the Russian settlements on the north-west coast; the majority of the party set out on the same day on their journey across the continent, through the posts of the North-West Company, and under their protection—thus deserting interests which had been cherished by treasure and blood. Our brig was manned by the crew of the ship Lark, wrecked on her passage to Columbia River, near the Sandwich Islands. *Her* captain was our sailing-master, and Mr —— our captain. H. and myself were the recruits embarked at Columbia River. After being detained several days for a leading wind over the bar, we got safely to sea. The staggering breeze which drove us rapidly on our way, soon dissipated the moody thoughts this irksome delay and change of habit had engendered. With the usual proportion of snow-storms, squalls, and gales, for which this navigation is distinguished, we arrived at Norfolk Sound, in the first days of May, and rounding the little island in front of the fort, saluted Count Baranoff with nine guns.

Of this roystering old Muscovite, Mr —— had some knowledge. Two years previously, he had visited and sold him the Beaver's cargo. Certain of his characteristics did not find grace in Mr ——'s eyes. The predominant one of getting royally drunk, and insisting on his guests being equally so, before business could be commenced, was, at any rate, no feather in his cap. Whether in self-defence the old gentleman found it necessary to do so, or whether it was from pure love of liquor, is not for me to say. He may have found the Boston captains, as others have, too many for him when they were sober—and the punch (by which name he dignified his mixture of three-fourths burning arrack and the remainder Yankee rum) tend to obfuscate their cuteness, and keep his own in its native brightness. Let this be as it may, the law was positive. Besides these deep-drinking habits, there were other attributes of character, not remarkable for amiableness, inasmuch as he was a hard-headed, perverse, and absolute old gentleman. When any thing had gone wrong with him, during the last forty years, he had thwacked and belaboured his lieutenant-governor, captains, and subalterns; and happy were they if the banging was the only consequence—for, if obliged to pent up his humours, and bide his time, the results were more serious. He had an innate prejudice against a cold-water man, while his heart warmed towards a free-drinking, careless wight, who would enter into his prosnicks with gusto. His long exercise of absolute despotism had not totally eradicated every trait of gentlemanly feeling—those were occasionally exhibited, but they were few and far between.

Mr —— paid the usual complimentary visit soon after we anchored—told of the disastrous winding up of the Pacific Fur Company, and the consequent dissipation of the embryo plans of furnishing him exclusively his supplies—all which the old gentleman took very coolly, but entered with more interest on the matter of a *prosnick* he proposed giving next day to Mr —— and the young Indians he had on board. With whatever disagreeable anticipations Mr ——, whose habits were of a sober kind, might have looked forward to this jollification, they were not participated in by H. and myself. Our residence in the Indian country had not made us remarkably delicate in the choice of our edibles; and, for the drinking part, in the presumption of our years, we thought with Sam Patch, that some folks could do some things as well as some other folks.

The following day, rigged in our best, we landed in the little cove formed by the jutting precipice, on the summit of which were the governor's quarters. The Kodiak village of one or two hundred Indians, open on one side to the water, and palisadoed on the other three, with here and there a bastion, lay straggling around. Along the base of the precipice, tending inward from the shore, and where the descent was more gradual, ran one line of these palisades, through which a gate opened to a flight of broad steps, and up to a platform, where were mounted some three or four brass guns, and sentries posted. Rising from the far end of this platform was a much longer flight of steps leading to the area above, and crowned by the governor's domicile. This area was inclosed by a second row of palisades, and covered by chevaux-de-frise. Guns, large and small, were ready here to pour out destruction to any who approached with hostile intent. The imperial banner, emblem of dominion in so many fair realms of Europe and Asia, fluttered here, too, in the noon-day breeze—and, floating high above meaner things, spread its protecting shadow over this rugged American mount. Here, also, elevated in the air, look-out boxes, with each its watchful sentinel, peered over the surrounding country, and woe betide the unlucky wight who failed to give notice of any moving object.

No solitary canoe, with silent paddle, could steal over the secluded bay—no subtle Indian, with stealthy pace, could wind around the precincts his ghost-like way, unknown to the governor. Perched here in his eyrie—without a cabinet to discuss measures, without a congress to vex him, without a nest of waspish newspapers stinging him here and there—this responsibility-taking old potentate imbibed with satisfaction his punch, and practised his remedy—a stout hickory stick—without let or bar from any grumbling caitiff.

The inequalities of the mount were filled up with storehouses, barracks, and other buildings. On the apex the governor's house stood alone. It was raised one story from the entrance—a narrow staircase led up to his apartments, consisting of a long room, with partitions at each end, dividing off his sleeping-chamber and office, each of which was well garnished with military weapons. From the point of entrance there was a descending passage leading to a billiard-room, bathing-room, kitchen, &c. A sloping side to the precipice had admitted of this construction.

Punctually as the sun declined from his zenith, we entered the principal apartment. The type of royalty was seated on a sofa at the upper end of the room—chairs were ranged around, and a dining-table, invitingly spread out, was not the least interesting object. As he shook us cordially by the hand, and uttered in the *lingua franca* of the place, *Poshweehalti*—welcome—he actually looked amiable. The hale old nobleman at this time numbered about sixty years, and was in person of middle stature, with a goodly protuberance in front. His face, round and full, seamed by years and exposure, gave little token of his lion character. His features were common—keen grey eyes, which appeared to read those on whom they were bent, and partaking of a mixed expression—sometimes glaring with fierceness and sometimes casting a bland regard, were the only redeeming ones. Long military boots—dark inexpressibles—white vest, with an exuberance of lace ruffle flowing from his bosom—a bottle-green coat, of a military cut, from which dangled a medal—and wide ruffles flaring from the cuffs, completed the outer man.

The table was soon covered by several good-looking dishes, the steam of which was potent. Grasping his badge of authority, the stout cane, the governor advanced, and begged us to be seated. The lieutenant-governor, Lashinski by name, and one or two other dignitaries, were our attendants. The dinner was composed of various dishes of fish and wild-fowl, cooked in divers ways, in the shape of stews, ragouts, and pies—the sauce piquant, of which, was good train oil. This being the first Christian dinner we had seen for many years, met due honour from H. and myself; plateful after plateful of all and each disappeared with celerity. The old gentleman was pleased with the vigour of our attack, and in the fulness of his heart more than once uttered his satisfaction. Wine, rum, and arrack, were the diluents of this hyperborean repast. Whatever the governor drank, we drank; not from any slavish desire of pleasing him, but from the supposition that he knew what was best.

As we warmed with the feast, H.'s amusement and mine was to get the lieutenant-governor into a scrape. We alternately shouted "Lashinski," pointing to our empty glasses; and as we were at opposite ends of the table, he had to leave his seat to wait upon us, while each time he passed the old bear, he got a whack for his want of attention; and before we had done, the perspiration rolled from his head to his feet.

Every thing has an end, and so has a good dinner. The governor now proposed that we should drink our punch, a signal for a regular set-to in the billiard-room. We adjourned thither. A big urn, filled, not with piping hot water, but with piping hot punch, was introduced. A tumbler or two of it told us we were gone men, if it could not find some other passage than down our throats. There was no frill on our leather shirts, and we preferred scalding the out rather than the inside.

We commenced playing a pool, each man depositing in a pocket of the table a silver dollar as his stake. The players were the governor, his nephew, Lashinski, one or two other dignitaries, H., and myself. It so happened that in the first game the contest for the money lay between the governor and me, and a favourable chance presenting itself, notwithstanding numerous shakes of the head, and other signs of disapprobation from the jackals, I struck the old lion in the pocket, and so pocketed the dollars. He made me a low bow, with all the politeness of a gentleman of the old school, though looking, in spite of his efforts, like a chafed bulldog.

After a long pull at the punch, and a confounded hot bath, we returned to our game, and to my no small advantage the governor made me his partner. We thus continued *punching* it and *pooling* it, until some of us could no longer hit a ball. When we reached this happy state, old Blowhard doffed coat and boots, and made ready for a dance. Large as he was, he cut a queer figure; however, he led the van in a legitimate gallopade, round and round the billiard table, kicking up his heels, and frolicking like an old cart-horse; we all followed in his wake, whooping, hallooing, shouting, and cutting all sorts of capers. Every few minutes we were obliged to stop and drink punch. The old one was a good one to go, but became blown at last. He pulled up, and at his invitation, H. and myself seated ourselves by him. The others kept up the pace; and ever and anon, when there was any inclination to go at ease, or want of vigour in the whoop, whack came the remedy.

The count, in the meantime, was undergoing a process which soon qualified him for a prolongation of the revels. Evaporation was going on rapidly with him; wine, rum, and punch, rolled in streams from his pores, and in half an hour he seemed as good as new again. The punch, in lieu of tumblers, was now filled in pint bowls—the vacuum was shortly supplied, and the old sponge was quickly soaking again.

Three or four files of soldiers, with muskets and fixed bayonets, about this time entered, and stood stiff and rigid on each side of the door. A score of naked Indians, armed each with a knife, and bedaubed in various colours, next made their appearance. These seated themselves in a circle, with the exception of one, who moved slowly around within it, chanting in a low monotonous tone. In the chorus he was joined by the whole gang; his tones gradually became more rapid, and the chorus more energetic. At length they were all on their feet in motion, and every now and then approached H. and myself, flourishing their knives almost within reach of our eyes, and screeching and howling like so many madmen. We had seen better-looking Indians in their own wilds, without the presence of armed soldiers, playing with more grace similar wild antics, and could look therefore with unblenching eyes on their mimic warfare. We, too, could sing the war-song, and dance the war-dance, and, excited by the scene, we unrigged ourselves in a trice. Some jars of train oil, and bags of feathers, were ranged on one side of the room. We emptied one of these gravy-pots over us, and took the same liberty with a bag of feathers, and with jack-knife in hand, played our parts in the orgies. The old man was pleased; the inferior dignitaries had to follow suit. The punch circulated most rapidly. Indians and all were roaring drunk; the frantic revels were at their height. Seated on a bench, supported by the wall, and flourishing his stick, the old governor kept us to our work round and round the billiard-table, shouting and bellowing as long as he could make himself audible; his voice at length dwindled to a growl, in which the only word to be distinguished was *puncham*; his eyes twinkled, he tottered in his seat, and then fell in a lump on the floor, regularly sewed up—a consummation, though often devoutly wished for, few had the satisfaction of witnessing. Notwithstanding our vapour baths, in what guise, or how, and when, we got aboard, we know not. The next morning we found ourselves there, and ascertained that Mr —— had, with his usual forethought, made an early escape from the toils of this hard-drinking old potentate.

CHANGES IN ANIMALS.

AT a sitting of the Academy of Sciences at Paris in 1829, an interesting paper was read by M. Roulin, on the Changes which the Domestic Animals of Europe undergo when transported to the Equatorial Regions of the New World. The author's observations are stated to have been made in New Grenada and a part of Venezuela, from the 3d to the 10th degree of north latitude, and from the 70th to the 80th degree of west longitude. He states at the commencement of his paper, that the mammiferous animals brought from the old to the new continent, are pigs, sheep, goats, asses, horses, cows, and dogs, all of which are become more numerous than the indigenous animals of the new countries. It appears that the hog in the warm valleys of South America, wandering in the woods, and subsisting upon wild fruits, becomes very ferocious, and assumes almost the character of the wild boar. The first introduction of pigs into these climates was in St Domingo, in 1493, one year after the discovery of America. They were successively introduced into all the places inhabited by Spaniards; and in the space of half a century they were to be found multiplying rapidly, from the 25th degree of north latitude, to the 45th degree of south latitude. The larger animals were also first introduced into St Domingo, where for some years they did not appear to thrive; but by the persevering management of the colonists, they began to multiply prodigiously, and great numbers were sent to Mexico. Such at length was the fertility of production in St Domingo, that, notwithstanding numerous exportations, herds of 4000 head of cattle were very common in that island twenty-seven years after its discovery. Some herds are even stated to have numbered 8000; and in 1587, the exportation of hides from St Domingo was 35,444; and in the same year 64,350 hides were exported from New Grenada.

The principal treatment to ensure fecundity in these animals, was to pasture them in situations where the food possessed saline properties; in places where the quantity of salt either in the water or plants was small, they were found to deteriorate in quality, and to diminish in number. In these climates the cow undergoes a material change. It no longer furnishes the constant supply of milk which we obtain from it by artificial means in Europe; and in order to obtain that fluid at all, it is necessary that the calf should be continually with its mother. The milk obtained for domestic use is only that which accumulates during the night, when the calf is in a quiescent state. When the calf ceases to suck, the milk immediately dries up. The bulls and cows introduced from Europe into South America soon became wild; and at the present time it is only by repeated *battues* that they are kept in subjection. The ass undergoes in the provinces which M. Roulin has visited, less change than any other animal. He never becomes wild but in situations where the labour is excessive. The propagation of the

species is attended with several instances of deformity. It is very different with the horse. By the independent life which it leads, it almost resumes the character of the wild horse, and is remarkable for the great similarity of colour. A bright chesnut is the prevailing, and nearly the only colour of the horses in South America. The favourite pace of these horses is the amble, which they are taught at a very early age. They do not remain fit for service many years, as they become liable to swellings, which are generally incurable. When in this state, they are turned out and used for breeding. The result is very extraordinary; the colts born from parents which have been taught the ambling pace, have themselves the amble, as naturally as the colts in Europe have the trot. To these colts is given the name of *aguihillas*.

The first importation of dogs into South America was at the second voyage of Columbus. In his first battle with the Indians in South America, he had twenty blood-hounds, which were afterwards employed in Mexico and New Grenada, where their race remains almost without change. They are now used chiefly for stag-hunting, and are as formidable in their attack upon that animal, as they were formerly to the natives. Many of the South American dogs of pure race inherit the necessary instinct for the chase of the wild hog, in which they are employed. The address of this dog consists in moderating its ardour, so as not to attack any particular animal, but to keep in check the number by which it may be surrounded; whereas, a dog of bastard race, whatever may be its strength, is, for want of this precaution, instantly devoured.

The sheep introduced into America were not the *merinos*, but the two species called *tana basta* and *burda*. In temperate climates they have multiplied abundantly, without showing any tendency to submit to the domination of man. In the burning climate of the plains they do not propagate freely; and a curious phenomenon is there witnessed. The wool of the lambs grows at first, as in more temperate climates, but rather slowly. When in a fit state for shearing, there is nothing remarkable about its quality; and when removed, it grows again as in temperate climates; but if the proper time for shearing is allowed to go by, the wool becomes thick, falls off in patches, and leaves underneath not a new growth of wool or a barren place, as if from disease, but a short, shining, and close hair, exactly like the hair of the goat in the same climate; and where this hair once appears, there is never any return of wool. The goat, notwithstanding its form, which appears adapted to mountainous situations, thrives much better in the low valleys of South America than on the high points of the Cordilleras.

Among birds the changes have not been great. The fowls brought by the Spaniards multiplied abundantly in most situations; but on some elevated points, such as Cusco, and all the valley, it was for a long time impossible to get them to propagate. By dint of perseverance a few chickens were obtained. In these there was little fecundity; but their descendants were more fruitful, and they now produce with the same facility as in our climates. The same remark may be made of the goose, which has only been recently introduced into Bobota. The peacock, the Pintado fowl, and the pigeon, have undergone no change. The conclusions drawn from this Report are, 1st, That every animal, like man, requires time to accustom itself to climate; and, 2dly, That domestic animals, when left to themselves, have a great tendency towards the organisation of those of the same species in a wild state; and that a very short time only is necessary to produce that transformation.—*Calcutta Literary Gazette.*

ROBBY BELL AND HIS ASSES.

Some years by-gone, the above singular character was wont to travel in several of the southern counties of Scotland, accompanied by an old and faithful long-eared friend, bearing two enormous panniers, containing Robby's merchandise. This consisted of wooden, pewter, and horn spoons, needles and thread, pins, twopenny penknives, superb glittering brass rings and brooches, old ballads—in short, the most motley and miscellaneous collection of articles ever offered to the vulgar gaze. These, made up into bundles, Robby used to call his *pingles*. As he and his ass were doucely jogging along, under the genial influence of a fine May morning, the drooping ears of the latter were suddenly and majestically erected at the sound of an astounding braying on the other side of the hedge. In proof that even asses are not devoid of companionable qualities, away brushed the mercantile one through a gap in the hedge, scattering panniers and pingles to the four winds of heaven. Robby, who, with bonnet on head, and hands contemplatively screwed behind his back, had been trudging in the rear, witnessed the behaviour of the brute, and its direful consequences, with feelings of mingled rage and despondency. But previous to trying to regather the unfortunate pingles, prudence suggested the propriety of catching the delinquent. So unwearied and agile was the plaguy animal in his gambols, that an hour elapsed, and an acre of young wheat was completely trodden under foot, before he was clutched in the grasp of his justly incensed master. Crying with vexation, Robby next proceeded to collect his pingles, lying in heart-breaking confusion over the whole terrene surface; but he had scarcely commenced this agreeable task, when the lord of the manor appeared, and claimed the ass as a stray, or trespasser. Poor Robby, fairly at his wits' end, cried out in a fury, "It sets ye weel to speak that way o' my *cuddie*, when it was your ain deevil o' a cuddie's menseless thrapple brocht him ower. If yours had keepit his confounded cleek to himsel, naether me nor mine wad hae seen you or your wheat, but been five mile farrer on our gate." "Weel, Robby," said the laird, "a' this passion o' yours will no pay me for my acre o' wheat; but as I believe ye are an honest man, I'll let you gang wi' your bread-winner ('deil be in his feet!' muttered poor Robby), but no before you gie me your word to meet me at the Jeddart court, to answer this trespass, conform to law." There was no remedy, and the unfortunate vender of pingles was obliged to promise he would do so. When the trying hour arrived, he made his appearance before Lords G—— and H——, at that time on the Jedburgh circuit. Robby, it seems, had been in trouble before, and given more than one guinea to counsel without effect. He was now resolved to speak for himself. The prosecutor's charge for asinine delinquency was easily made, when Robby was called upon for his defence. He went on about the two asses in such an unintelligible rigmarole way, that the worthy judges were completely at fault. "My good man," said Lord G., "I am most willing to hear what you have to say, but really I do not understand you." "No understand me!" bellowed like a furnace the incensed Robby; "weel, man, gin you will ha' it, suppose ye were ae ass an' that man (pointing to Lord H.) another, an' ye were to *bray*, and he were to rin after ye, hoo the deil could I help it?" Then writhing himself a little aside in his vexation, he muttered, "A pair o' hairy, lang-lugged land-loupers *too*, by my faith!" Robby came off victorious.—*Literary Gazette.*

AS AE DOOR STEEKS, ANITHER CLOSES,

OR THE PROVERB REVERSED.

[From Poems and Songs, Humorous and Satirical, by Alexander Rodger. Glasgow, David Robertson, 1838.]

Methinks some auld Scotch proverb says,
"As ae door steeks anither opens;"
Though this may sometimes be the case,
It's sad reverse much oftener happens.
Let's therefore try the thing anew,
(Though it should be as old as Moses),
And prove this axiom just and true,
"As ae door steeks anither closes."

The man whose trade moves to his mind,
Is always sure of friends to help him,
And ne'er is at a loss to find
An open door—a hearty welcome;
But he, whose fortune's on the wane,
Who trics—and trics—and tries, but loses,
Soon finds just reason to complain,
"As ae door steeks anither closes."

The haughty minister of state,
Who proudly basks in royal sunshine,
While numbers daily on him wait,
To catch a glimpse of borrowed *moonshine*;
Poor man! for all his pomp and power,
He sleeps not on a bed of roses,
For should his lord but shut the door
Then every door against him closes.

The artizan whose dauntless mind
Revolts against his proud oppressor,
Turned off—can no employment find,
For being such a bold transgressor;
His suit is met in every place
With jibes, and jeers, and turned-up noses;
Thus feels he this sad truth, alas!
"As ae door steeks anither closes."

The spendthrift wild, who wastes his wealth
In rioting and dissipation,
Ne'er dreams, poor fool! of injured health,
Pale want, or blasted reputation.
Disease and poverty come on,
His credit every where he loses,
Even self-respect at last is gone,
Door after door against him closes.

The poor neglected virtuous man,
Who long the storms of life has braved,
Sinks down, at last, exhausted—wan—
Of every earthly stay bereaved;
Yet still has he one prop that's sure,
On which his harassed soul reposes,
Though spurned from every earthly door,
The door of Heaven never closes.

MAN OVERBOARD!

Some years ago, when swimming exploits were much talked of, a correspondent of the *Montreal Herald* related the story which here ensues:—"During my servitude on board the Dolphin man-of-war, bound for the West Indies, we were going one day at the rate of about three knots and a half, when Tom Starboard, belonging to the fore-top (who, by the bye, was a bit of a wag), sleeping in the lee fore-chains, by a sudden lurch of the ship was thrown overboard. 'A man overboard!' was the general cry fore and aft—and every one ran to offer or give assistance to the drowning man. Tom, who was a tolerably good swimmer, as every body thought, but nothing extraordinary, woke, on finding himself in deep water, and began to use his paddles, the ship passing ahead, as I was saying before, at the rate of three knots and a half. Tom was soon lost sight of under the counter (for although our ship was not on Sir Robert Sepping's plan, yet she was pretty full abaft), when he was lucky enough to get hold of the rudder chains. The hands all ran off expecting to see Tom astern, and to lower the jolly boat down to pick him up; but no Tom was to be seen. 'He is gone,' said they, 'to Davy's locker,' and efforts ceased. Our ship was very deep, bound out to the West Indies, consequently our gun-room ports were low in the water. This Tom saw; and as it was getting dark, he thought he would wait till they had bent to quarters, and piped the hammocks down, before he got on board, which he did, and then popped down into the lady's hold (where the gunner keeps his wads and spare monkeys' tails), and there remained till the middle of the first watch, when he sallied forth and made free with our bread bags, taking enough to serve him for three days. At the end of this time we were jogging along at an easy rate, with scarcely any wind, about a knot an hour, when Master Tom, unobserved, slips out of the port he came in at, and, dropping astern, began to hail the ship—'The Dolphin, a-hoy!' 'Halloo,' says the quarter-master, who was about getting a pull on the main brace. Says Tom, 'If you don't back the main-top-sail and heave to, I shall sink, for no man can swim to the West Indies without provisions!' Every body ran aft in amazement, for it had been blowing fresh during the time we supposed he had been overboard; but there was no time to be lost, so the boat was lowered, and poor Tom picked up, to the great gratification and astonishment of every body on board. On our arrival, as the captain was on shore dining with the governor, the talk turned upon swimming. The governor was extolling the powers of a black man he had, and our captain swore no man could swim with Tom Starboard, of the Dolphin's fore-top; however, to make a long story short, the captain and the governor made a heavy bet—the time was appointed—Tom asked one week to get ready. The carpenters were ordered to make what chests and conveniences Tom required. The purser was instructed, at his request, to supply a fortnight's provisions. The day came, and Tom went on shore at the wharf appointed, when he began to stow his grub. The black fellow looked at him with astonishment. 'What you do dere, massa?' says he. 'What am I doing here?' says Tom; 'why, I am taking in my provisions to be sure, and I advise you to do the same, for not a bit of this do you get on the road.' 'Why, massa,' says the negro, 'me no swim more nine or ten miles.' 'Nine or ten miles!' say Tom, as if in amazement at the short distance; 'why, man, I'm going to Tobago, which I believe is over two hundred miles, and shan't be back for a fortnight.' The spectators were astounded. The black refused to swim. The governor lost his wager, and it was not until we were homeward bound that Tom told the secret."

DIALOGUE BETWEEN ECHO AND A GLUTTON.

The following lines, written in the year 1609, are said to have induced Butler to pursue the same idea in his "Hudibras."

DIALOGUE.

Glutton. My belly I do deify.
Echo. Fie!
Glut. Who curbs his appetite's a fool.
Echo. Ah, fool!
Glut. I do not like this abstinence.
Echo. Hence!
Glut. My joy's a feast, my wish is wine.
Echo. Swine!
Glut. We epicures are happy truly
Echo. You lie!
Glut. May I not, Echo, eat my fill?
Echo. Ill.
Glut. Will it hurt me if I eat too much?
Echo. Much.
Glut. Thou mock'st me, Nymph; I'll not believe it.
Echo. Believe it.
Glut. Do'st thou condemn, then, what I do?
Echo. I do.
Glut. Is it that which brings infirmities.
Echo. It is.
Glut. Then, sweetest temperance, I'll love thee.
Echo. I love thee.
Glut. If all be true which thou do'st tell,
To gluttony I bid farewell.
Echo. Farewell!

EMIGRATION.

A GENTLEMAN writes to us in the following terms from a town in the west of England:—"Through the instrumentality of your Journal, I am induced to leave this country for New South Wales. The only argument which my friends adduce against my resolution is, that they are somewhat incredulous as to the statements which have appeared of late in your Journal, under the title of *Emigration to New South Wales*. They fancy the account is over-coloured, and that Messrs Chambers have some interest in writing those articles, besides the desire of filling their paper—in short, that they have been bribed to do it by some interested party. This is also becoming a prevailing opinion with the public, and no doubt has deterred many situated like myself from acting upon your information, as they would otherwise have been disposed to do,"—&c.

Though it is of course painful to learn that any considerable number of persons should have formed such a surmise respecting us, it is needless to express any indignation on the subject. It is perhaps not unnatural for individuals of little reading, and who know nothing of us but through the medium of a sheet of humble appearance and pretensions, to suspect interested motives where none but the most pure are entertained. We are hopeful that, where we are personally better known, no such notion could be formed. Suffice it, however, on the present occasion, that we give an earnest and straightforward assurance of our being actuated, in the composition and publication of articles on the colonies, solely by a desire to furnish correct information on subjects in which we know a large portion of the community to be interested. To error, of course, we are liable, and it is not impossible that our authorities may not always be faithful; but of our sincere anxiety to be correct, the public may rest perfectly satisfied. With parties who are interested by views of personal profit in the promotion of emigration, we have no connection of any kind; nor were we ever, even, asked by any such parties to favour their views in the least tittle.

PAYMENT OF TAXES BY THE FRIENDS.

A quoted paragraph in No. 337, entitled the *Quaker and the Quakers*, contained incidentally a statement that the Friends do not voluntarily pay taxes to the government. We learn that this is incorrect. The Friends are said by our correspondent to pay taxes of all kinds voluntarily, except those which bear reference to the maintenance of religion.

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